

# Big Blue® 400 PipePro®

**Diesel Engine-Driven  
Welder/AC Generator** 

## Quick Specs

### Heavy Industrial Applications

Cross-country pipeline  
Process pipe welding

### Processes

Stick (SMAW)  
MIG (GMAW)\*  
Flux-cored (FCAW)\*  
RMD®\*\*  
Pulsed MIG (GMAW-P)\*\*  
DC TIG (GTAW)  
Air carbon arc (CAC-A)  
Rated: 1/4-inch (6.4 mm) carbons

**Output Range** DC stick 20–400 A  
MIG/flux-cored 14–40 V  
DC TIG 20–400 A

**Generator Output Rated at 104°F (40°C)**  
12,000 watts peak, 10,000 watts continuous

**Accu-Rated™ – Not Inflated  
Generator Power**

\*With wire feeder. \*\*With ArcReach Smart Feeder.

## Designed for the transmission pipeline welder.

The Big Blue 400 PipePro offers superior downhill stick arc characteristics, as well as MIG/flux-cored capabilities, to meet high-strength steel requirements for the most demanding pipeline jobs.

**Heavy-duty low-speed T4F industrial diesel engines** designed to operate over 10,000 hours before the first basic overhaul. Backed by worldwide support and service.

 **MITSUBISHI ENGINE NORTH AMERICA, INC.**  
Mitsubishi S4L2 four-cylinder diesel.

 **CATERPILLAR**  
C1.5T turbo-charged three-cylinder diesel.

**DYNAMIC DIG™**

Optimized arc control for stick welding applications. See page 2.

**ArcReach®**

Parameter control at the wire feeder or pendant without needing a control cord. See page 2.



Also available with stainless steel enclosure. See page 8.



**WIRELESS**  
INTERFACE CONTROL



**NEW!**

Full control of your machine in the palm of your hand. Wireless interface control is standard on all models. See page 3.



Durable and built to last in harsh industrial environments.



Processes optimized for pipe welding.



Compact size is perfect for mobile welding rigs.

 **T4F**  
COMPLIANT

**TRUE BLUE®**  
3YR. WARRANTY

Welder/generator is warranted for three years, parts and labor.  
Engine is warranted separately by engine manufacturer.



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## Big Blue® 400 PipePro® Features and Controls

**Digital meters** with SunVision™ technology enable welding parameters to be viewed with greater clarity than analog meters — at virtually any angle. Meters can be seen clearly even in direct sunlight.

### Meters display

- Process settings for quick and easy setup
- Preset and actual amperage

### Simple-to-set controls

require no elaborate procedure — just select process and weld.

### 10,000 watts of pure generator power.

Plug in an extra Miller® inverter-based power source for a second welding arc.

### Industrial USB port.

Quickly upload the latest software and download machine log files.



**Thermal overload protection** prevents machine damage if the duty cycle is exceeded or airflow is blocked.

**Quiet operation.** Improves jobsite communication.

**Optional stainless steel enclosure.** Enhances durability and adds to the look and resale value of the machine.



**Arc control** allows arc characteristics to be adjusted in stick and wire processes. In stick modes, unlock the benefits of Dynamic DIG, which gives welders the fine-tuning they need to overcome issues related to fitup and inconsistencies in the pipe.

**Standard 14-pin receptacle with Auto-Remote Sense™** for simple connection of remote controls and wire feeders.

**Low OCV stick (VRD)**, when enabled, reduces the open-circuit voltage to 30 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

**LINE-X®** LINE-X® top cover is workbench tough and provides superior impact, corrosion and abrasion protection.

**Standard features include** wireless interface control, adjustable Hot Start™, automatic idle, thermal overload protection, 120-volt block heater, Dynamic DIG™, engine coolant temperature gauge and lift-off service door.

## Big Blue® 400 PipePro® Technologies

### Dynamic DIG™ technology



**Ultra-adaptive arc control.** Unlike conventional DIG that provides a preset amount of short-clearing current, Miller-exclusive Dynamic DIG technology works on a time-based algorithm that automatically

adjusts the amount of current required to clear a short. Delivers a smoother more consistent arc that can be tailored to match application, material, fit-up and welder technique.

### ArcReach® technology



**Parameter control at the wire feeder or pendant without needing a control cord.**

An ArcReach system allows you to change weld settings from your ArcReach feeder or stick/TIG remote, saving a trip to the power supply. ArcReach technology uses the existing weld cable to communicate welding control information between the feeder or stick/TIG remote and the power source. This technology eliminates the need for control cords, and their associated problems and costs.

ArcReach-equipped power sources work with non-ArcReach accessories; however the ArcReach benefit is only realized with the complete ArcReach system. This includes an ArcReach-equipped machine and one or more of the following accessories:

- ArcReach SuitCase feeder
- ArcReach Smart Feeder
- ArcReach Stick/TIG Remote

See pages 6 and 7 for more information.

# Big Blue® 400 PipePro® Technologies

## Wireless interface control

### WIRELESS INTERFACE CONTROL

Elevate your performance. Now get full control of your Big Blue 400 PipePro in the palm of your hand.

Delivering full weld process and parameter control, customizable presets and engine start/stop, wireless interface control eliminates the need to go back to your machine or climb into the truck to make adjustments — maximizing efficiency and saving you money on fuel.



**Remote process and parameter changes.** With wireless interface control, you can remotely make changes to critical processes and arc control parameters between passes or weld joints from wherever you are on the jobsite.



**Programmable weld settings.** You can also customize and save up to four different weld programs with the push of a button, saving you time, effort and adding consistency to your setup between welds.

### VIEW STATUS

View engine status, fuel level, and battery charge level of remote.

### SELECT PROCESSES

View and select between all available processes.

### CONTACTOR ON/OFF

Turn contactor on/off manually in remote welding mode.

### ENGINE ON/OFF

Turn engine on/off with remote.



### CUSTOM PROGRAMS

Save custom presets in up to four programs and easily switch between pre-programmed settings.

### FINE-TUNE ARC

Quickly adjust and save arc control settings including DIG, DIG range inductance and Auto-Stop.

### AMP/VOLT ADJUST

Adjust amperage or voltage, by increments or percentage, while welding.

**Wireless interface control is factory installed on all Big Blue 400 PipePro machines.**

## Big Blue® 400 PipePro® Benefits

### Optimized processes for pipeline welding



Tailor your arc and increase deposition rates with welding processes and technologies optimized for pipe welding. Dynamic DIG offers ultimate flexibility in arc

characteristic and penetration control. Advanced processes, available with the ArcReach® Smart Feeder, help operators improve quality and productivity on the right of way.

### Easily update technology



With the industrial USB port, you can easily upload the latest software and download machine log files to retrieve in-depth information from your machine such as diagnostics and statistics.

Visit [MillerWelds.com/support](http://MillerWelds.com/support) to download the latest software updates.

### Built for the welding rig



The Big Blue 400 PipePro is the smallest, lightest and most powerful welder in it's class. This means less wear and tear on the truck chassis, more room and capacity

for equipment, and greater visibility out the rear window of the truck. The LINE-X® top cover and optional stainless steel enclosure provides additional durability for tough environments.

### Jobsite safety



Reduce the need to walk back to or climb into the truck bed to make process and parameter changes, or turn your machine on/off. ArcReach® technology provides

parameter control at the wire feeder or stick/TIG remote and wireless interface control provides full front panel control in the palm of your hand, so you can lower the risk of encountering potential jobsite hazards.

# Specifications (Subject to change without notice.)



Weld Mode/ Process	Weld Output Range	Weld Output Rated at 100% Duty Cycle at 104°F (40°C)	Max. Open-Circuit Voltage	Generator Power Output Rated at 104°F (40°C)**	Sound Levels at Rated Output, 23 ft. (7 m)	Dimensions	Net Weight (without fuel)***
CC/DC (TIG)	20–400 A	300 A at 32 VDC 350 A at 27 VDC 400 A at 24 VDC	85 VDC 30 VDC*	12,000 watts peak, 10,000 watts continuous  1-phase, 84/42 A, 120/240 VAC, 60 Hz	<b>CAT</b> Idle: 65 dB (90 Lwa) Weld: 71.2 dB (96 Lwa) <b>Mitsubishi</b> Idle: 68.7 dB (93 Lwa) Weld: 72.1 dB (97 Lwa)	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1,422 mm)	<b>CAT</b> 1,038 lb. (471 kg) <b>Mitsubishi</b> 993 lb. (450 kg)
CC/DC (Stick)	20–400 A						
CV/DC (FCAW/MIG)	14–40 V						

\*Sense voltage for Lift-Arc™ TIG and stick with VRD on.

\*\*Will operate either 60 Hz or 50/60 Hz power tools, lights, etc.

\*\*\*Additional 82 lb. (37 kg) when fuel tank is full.

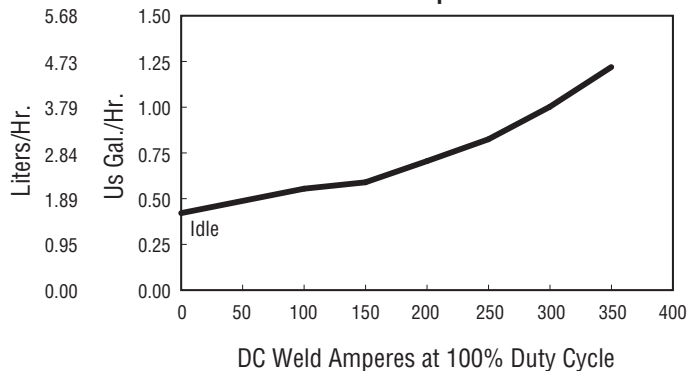
Certified by Canadian Standards Association to both the Canadian and U.S. Standards. Meets NEMA and IEC output ratings.

## Engine Specifications (Engines warranted separately by the engine manufacturer.)

Engine Brand	Features	HP	Type	Engine Speeds	Capacities	Automatic Engine Shutdown
Caterpillar C1.5T	EPA Tier 4 Final compliant, includes 120 V block heater	24.7	Turbo-charged three-cylinder, liquid-cooled industrial diesel	Idle: 1,500 rpm Weld: 1,800 rpm	Fuel: 11.5 gal. (43.5 L) Oil: 5.9 qt. (5.6 L) Coolant: 6 qt. (5.7 L)	Low oil pressure, high coolant temperature, low fuel level
Mitsubishi S4L2			Four-cylinder, liquid-cooled industrial diesel			

## Performance Data

Fuel Consumption Curve



Simultaneous Welding and Power

Weld Amperes	Total Aux. Power Available (Watts)
25 A	10,000
75 A	10,000
125 A	10,000
175 A	9,000
225 A	7,500
300 A	4,500
350 A	1,000

# Function Guide

- Self-calibrating digital weld meters with fault code indication** display preset or actual weld parameters.
- Pushbutton main control knob** used for adjusting amperage/voltage, adjusting arc control, and accessing the service menu.
- LED process indicator.** Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source.

## 4. Lift-Arc™ TIG with Auto-Stop™ and Auto-Crater™

- USB port** allows software updates from a USB drive. A summary file of recorded data from the unit will be saved to a USB drive that is inserted.
- Weatherproof Lexan® nameplate** is super durable and resists cracking and fading.
- Adjustable arc control** adjusts DIG when process control is in stick mode and adjusts inductance when process control is in FCAW or MIG mode. The amount of DIG determines how much amperage (heat) varies with stick arc length. Inductance determines the “wetness” of the weld puddle.

- Maintenance interval reminder.** Yellow and red indicator lights let an operator know when the machine is approaching and finally in need of routine maintenance.

- Fuel indicator gauge.** Low fuel shutdown shuts engine off prior to running out of fuel to prevent loss of fuel in the system, and make restarts easy.

- Engine coolant temperature gauge** displays coolant temperature. Engine stops if temperature exceeds 230°F (110°C).

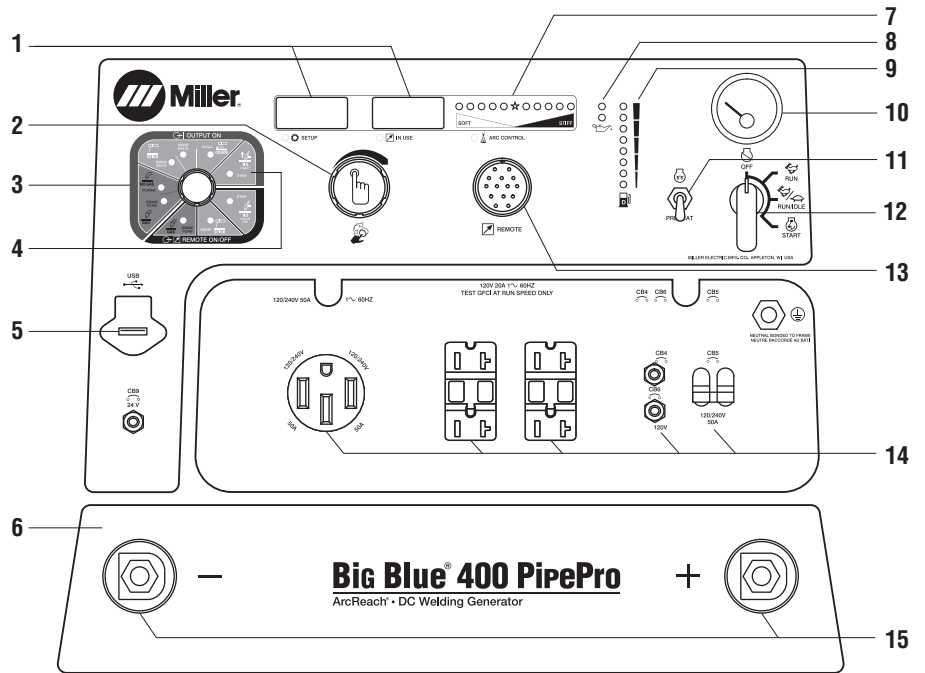
- Glow plugs** assist in cold weather starting.

- Engine control switch** is used to start the engine and then select between auto idle and high speed lock.

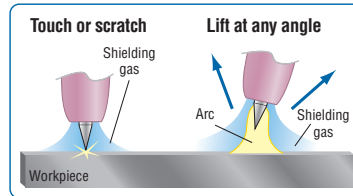
- Standard 14-pin receptacle** for simple connection of remote controls and wire feeders. Includes **Auto Remote Sense™** which automatically switches from panel to remote amperage/voltage (A/V) control with remote connected. Eliminates confusion of a panel/remote switch.

- 50 A, 120/240 V receptacle and 20 A, 120 V GFCI receptacles with circuit breakers**  
Note: For matching 240 V plug, order **119172**.

- Weld output terminals**

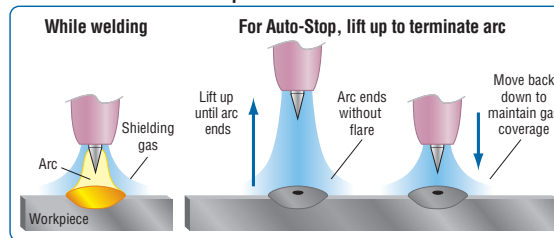


### ARC START with Lift-Arc™



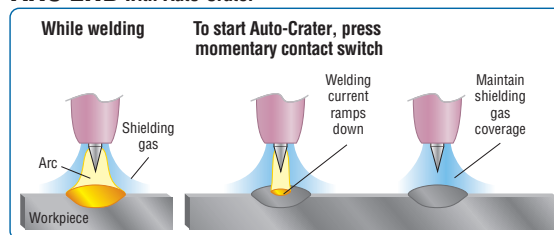
- Reduces or eliminates sticking
- Reduces or eliminates electrode/work contamination
- Low open-circuit voltage

### ARC END with Auto-Stop™



- Eliminates need for a remote control
- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Eliminates unwanted arc strikes outside the weld area

### ARC END with Auto-Crater™



- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Auto-Crater time allows for addition of filler
- Eliminates unwanted arc strikes outside the weld area

## Genuine Miller® Accessories



**Wireless Interface Control Replacement Kit 288137** Field  
Replacement kit for wireless interface control machines. NOT compatible with machines that are not equipped with

wireless interface control. Includes replacement remote, magnetic lanyard, USB charger, 110-volt adapter, and two screen protectors.

### Wireless Interface Control Protective Covers 287594

Field  
Five-pack of screen protectors for wireless interface control remote.



Female Receptacle



**Full KVA Adapter Cord 300517** Field  
NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic® and Spectrum® 240 V plug.



**Full KVA Plug Kit 119172** Field  
120/240 V, 50 A plug (NEMA 14-50P) to fit full KVA receptacle.

### Engine Filter Kits

Field  
**274427** For CAT Turbo  
**252782** For Mitsubishi  
Includes all filters required for proper engine maintenance. Oil filter, primary and secondary fuel filter, and primary air filter.



**Spark Arrestor (Muffler) Kit 300585** Field  
Prevents particles from leaving the muffler that could potentially start a

fire. Mandatory when operating on California grasslands, brush, or forest-covered land, and in all national forests. For other areas, check your state and local laws. Meets U.S. Forest Service Standard 5100-1B.



**FA-1D Lockable Flame Arrestor Fuel Cap 043947** Field  
Fuel cap can be padlocked to prevent vandalism. A built-in flame arrestor prevents flames or sparks from entering the fuel tank.



**Protective Cover 195301** Field  
Blue water-resistant cover with Miller logo resists stains and mildew, and protects the finish of your welder.

## MIG/Flux-cored Welding



**ArcReach® SuitCase® 8 951726** With Bernard® BTB Gun 300 A  
**951727** With Bernard® S-Gun™  
**951728** With Bernard® Dura-Flux™ gun

**ArcReach® SuitCase® 12 951729** With Bernard® BTB Gun 300 A  
**951730** With Bernard® S-Gun™  
**951731** With Bernard® Dura-Flux™ gun

**ArcReach® SuitCase® 12 Heavy Duty 301604** Feeder only — for 3/32-inch cored wire  
Portable feeder designed to run off of arc voltage. When paired with an ArcReach power source, provides remote control of the power source without a control cord — saving time and money. See literature M/6.55.



**ArcReach® Smart Feeder 951733**  
For use with ArcReach models only (see page 3 for more information). Includes drive rolls and Bernard® PipeWorx 300-15 MIG gun. For MIG, FCAW, and advanced RMD® and pulse processes. See literature M/6.55.



**SuitCase® 12RC Wire Feeder 951580**  
Lightweight and flexible enough to run wires up to .062-inch diameter. Includes remote voltage control, drive roll kit and Bernard® BTB Gun 300 A. See literature M/6.5.

### MIG (GMAW)/Flux-cored (FCAW) Guns

See Bernard® literature SP-BTB for BTB air-cooled MIG guns, and SP-DF for Dura-Flux™ self-shielded flux-cored guns.



**Spoolmatic® 30A Spool Gun 130831**  
Air-cooled, 200-amp, one-pound spool gun for aluminum and stainless MIG. See literature M/1.73. Requires WC-24 Control **137549**.

### XR™ Wire Feeders and Guns

Push-pull system designed to handle difficult-to-feed soft alloy wires such as aluminum. See literature M/1.7 through M/1.74.

## AC TIG (GTAW) Welding

The Dynasty 210 power sources can be run off the engine drive's generator to provide two arcs with only one engine.



**Dynasty® 210 Series**  
For portable AC/DC TIG. See literature AD/4.81.

## Multiple Operator Welding

The XMT 350 FieldPro and CST 280 power sources can be run off the engine drive's generator to provide two arcs with only one engine.



**XMT® 350 FieldPro™**  
See literature DC/18.96.



**CST™ 282**  
See literature DC/29.6.

## Genuine Miller® Accessories (Continued)

### Plasma Cutting



Spectrum 375 X-TREME and 625 X-TREME shown.

**Spectrum® 375 X-TREME™ 907529**

See literature PC/9.2.

**Spectrum® 625 X-TREME™ 907579**

See literature PC/9.6.

**Spectrum® 875 907583**

See literature PC/9.8.

The Spectrum 375 X-TREME and 625 X-TREME come complete with protective X-CASE™ (not shown).

### Stick/TIG Remote Controls



**ArcReach® Stick/TIG Remote 301325**

When paired with an ArcReach power source, provides remote control of the power source without a control cord — saving time

and money. See literature AY/14.5.



**RMS-14 On/Off Control 187208**

Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5-foot (8 m) cord and 14-pin plug.



**RCC-14 Remote Contactor and Current Control 151086**

East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord and 14-pin plug.

**Extension Cables for 14-Pin Remote Controls or 24 VAC Wire Feeders**

**242208025** 25 ft. (7.6 m)

**242208050** 50 ft. (15.2 m)

**242208080** 80 ft. (24.4 m)

## Trailers and Hitches (Note: Trailers are shipped unassembled.)



**HWY-Mid Frame Trailer 301438**

1,424-pound (646 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, fenders, lights, and dual hitch with 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye.

**Dual Hitch 301441**

Combination 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye in one reversible assembly.



**Cable Tree 043826**

Provides an area to conveniently wrap weld cables and extension cords.

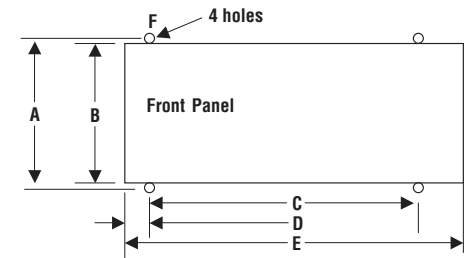


**2-In-1 Document/ Fire Extinguisher Holder 301236**

Stores documents and holds a 5-pound fire extinguisher.

*Note: Holder shown mounted on trailer. Fire extinguisher not included.*

## Mounting Specifications



**A.** 27.75 in. (705 mm)

**B.** 26.25 in. (667 mm)

**C.** 52.25 in. (1,327 mm)

**D.** 2 in. (51 mm)

**E.** 56 in. (1,422 mm)

**F.** .562 in. (14 mm) diameter

**Height:** 32 in. (813 mm)

**Width:** 26.25 in. (667 mm)

**Depth:** 56 in. (1,422 mm)

### Trailer Specifications (Subject to change without notice.)

Model	Gross Axle Weight Rating	Gross Vehicle Weight Rating	Net Payload	Height of Bed	Road Clearance	Track (Center to center of tires)	Standard Tires (Standard rating or P-size rating)	Dimensions	Net Weight
HWY-Mid Frame	1,605 lb. (728 kg)	1,424 lb. (646 kg)	1,424 lb. (646 kg)	19.5 in. (495 mm)	8 in. (203 mm)	46 in. (1,168 mm)	ST175/80D-13 Load Range C	Length: 101 in. (2,565 mm) Width: 55 in. (1,397 mm)*	181 lb. (82 kg)

\*Width at outside of fenders.

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
<b>Big Blue® 400 PipePro®</b>	<b>907806</b>	CAT. Stainless steel with wireless interface control and ArcReach		
	<b>907806001</b>	CAT. Blue with wireless interface control and ArcReach		
	<b>907805</b>	Mitsubishi. Stainless steel with wireless interface control and ArcReach		
	<b>907805001</b>	Mitsubishi. Blue with wireless interface control and ArcReach		
<b>Field Accessories</b>				
Wireless Interface Control Replacement Kit	<b>288137</b>	See page 6 for items included		
Wireless Interface Control Protective Covers	<b>287594</b>	Five-pack of screen protectors for wireless interface control remote		
Full KVA Adapter Cord	<b>300517</b>			
Full KVA Plug Kit	<b>119172</b>	120/240 V		
Engine Filter Kits	<b>274427</b>	For CAT Turbo. Includes air, oil and fuel filters		
	<b>252782</b>	For Mitsubishi. Includes air, oil and fuel filters		
Spark Arrestor (Muffler) Kit	<b>300585</b>			
FA-1D Lockable Flame Arrestor Fuel Cap	<b>043947</b>			
Protective Cover	<b>195301</b>			
<b>MIG/Flux-cored Welding</b>				
ArcReach® SuitCase® 8	<b>951726</b>	With Bernard® BTB Gun 300 A. See literature M/6.55		
	<b>951727</b>	With Bernard® S-Gun™		
	<b>951728</b>	With Bernard® Dura-Flux™ gun		
ArcReach® SuitCase® 12	<b>951729</b>	With Bernard® BTB Gun 300 A. See literature M/6.55		
	<b>951730</b>	With Bernard® S-Gun™		
	<b>951731</b>	With Bernard® Dura-Flux™ gun		
ArcReach® SuitCase® 12 Heavy Duty	<b>301604</b>	Feeder only — for 3/32-inch cored wire		
ArcReach® Smart Feeder	<b>951733</b>	MIG/FCAW/RMD®/pulse feeder with Bernard® PipeWorx 300-15 MIG gun. Tweco®-style connectors. See literature M/6.55		
SuitCase® 12RC	<b>951580</b>	With Bernard® BTB Gun 300 A. See literature M/6.5		
MIG (GMAW) and Flux-cored (FCAW) Guns		See Bernard® literature SP-BTB and SP-DF		
Spoolmatic® 30A Spool Gun	<b>130831</b>	Requires WC-24 Control. See literature M/1.73		
WC-24 Control	<b>137549</b>	See literature M/1.73		
XR™ Wire Feeder Control and Guns		See literature M/1.7 through M/1.74		
<b>AC TIG Welding</b>				
		See page 6		
<b>Multiple Operator Welding</b>				
		See page 6		
<b>Plasma Cutting</b>				
		See page 7		
<b>Stick/TIG Remote Controls</b>				
ArcReach® Stick/TIG Remote	<b>301325</b>	Provides remote control of stick and TIG processes without a control cord		
RMS-14 On/Off Control	<b>187208</b>	Remote contactor control		
RCC-14 Remote Contactor and Current Control	<b>151086</b>	Fingertip control		
Extension Cables		See page 7		
<b>Trailers and Hitches</b>				
HWY-Mid Frame	<b>301438</b>	Trailer with lights, fenders and dual hitch. For highway use		
Dual Hitch	<b>301441</b>	Combination 2 in. (50 mm) ball hitch and 3 in. (76 mm) lunette eye in one reversible assembly		
Cable Tree	<b>043826</b>	Trailer-mounted cable holder		
2-In-1 Document/Fire Extinguisher Holder	<b>301236</b>	Stores documents and holds a 5 lb. fire extinguisher		

Date:

Total Quoted Price:

Distributed by:

